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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,520	10/26/2005	Fabrizio Donazzi	05788.0345-00000	5774

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EXAMINER	
MAYO III, WILLIAM H	

ART UNIT	PAPER NUMBER
2831	

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/530,520	DONAZZI ET AL.	
	Examiner	Art Unit	
	William H. Mayo III	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *28-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *28-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 April 2005* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because Figure 2a lacks the proper cross-hatching which indicates the type of materials, which may be in an invention. Specifically, the cross hatching to indicate the conductive and insulative materials is improper. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials. Correction is required.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 28-29, 35-37, 39, and 41-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Siewerth (DE Pat Num 27 10620). Siewerth discloses an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3). Specifically, with respect to claim 28, Siewerth discloses an electrical power transmission line (Fig 1) comprising at least one electrical cable (not shown), a conduit (1) of ferromagnetic material enclosing said at least one cable (not shown) and comprising a base (at 2) and a cover (at 4) and electrical contact elements (5) electrically connecting said base (at 2) and said cover (at 4), wherein said electrical contact elements (5) are selected from the group of metal fusion joints and resilient members suitable to penetrate said ferromagnetic material (Page 6). With respect to claim 29, Siewerth discloses that the base (at 2) and said cover (at 4) have superimposed portions on both sides of said conduit (Fig 1), and wherein said electrical contact elements (5) are applied to said superimposed portions (Page 6). With respect to claim 35, Siewerth discloses that the conduit (1) comprises a plurality of longitudinal sections (5) partially superimposed on each other and each comprising a base portion (at 2) and a cover portion (at 4, Page 6). With respect to claim 36, Siewerth discloses that longitudinal sections (5) are electrically coupled to each other (at 7, Page 7). With respect to claim 37, Siewerth discloses that the cover portion (at 4) and the base portion (at 7) each have longitudinal sections (5) which are longitudinally shifted from each other (Fig 1). With respect to claim 39, Siewerth discloses that the ferromagnetic material may be steel (Page 6). With respect to claim 41, Siewerth discloses that at

least two of said longitudinal sections (5) extend along different directions (Fig 1), wherein said conduit (1) comprises a joining member (7) for joining said two conduit sections (5), and wherein said joining member (7) consists of two parts electrically connected by means of said electrical contact elements (Pages 6-7). With respect to claim 42, Siewerth discloses that said base portion (at 2) has a "U-shaped cross-section (Fig 1). With respect to claim 43, Siewerth discloses that the cover portion (at 4) is substantially flat (Fig 1). With respect to claim 44, Siewerth discloses that the conduit (1) is placed underground (Fig 5). With respect to claim 45, Siewerth discloses that the material having a magnetic permeability greater than air is positioned between said superimposed portions of said base (at 2) and said cover (at 4).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 31, 32-34, 38, 40, 46-51, and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siewerth (DE Pat Num 27 10620). Siewerth discloses an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3). With respect to claim 46, Siewerth discloses a method of screening an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3), wherein the transmission line (Fig 1) comprises at least one electrical cable (not shown) being placed in a conduit (1) of ferromagnetic material enclosing said at least one cable (not shown) and comprising a base (at 2) and a cover (at 4) and providing electrical contact elements (5) electrically connecting said base (at 2) and said cover (at 4), wherein said electrical contact elements (5) are selected from the group of metal fusion joints and resilient members suitable to penetrate said ferromagnetic material (Page 6). With

respect to claim 49, Siewerth discloses that the base (at 2) and said cover (at 4) have superimposed portions on both sides of said conduit (Fig 1), and wherein said electrical contact elements (5) are applied to said superimposed portions (Page 6). With respect to claim 50, Siewerth discloses that the conduit (1) comprises a plurality of longitudinal sections (5) partially superimposed on each other and each comprising a base portion (at 2) and a cover portion (at 4, Page 6), through metal fusion (Page 6). With respect to claim 51, Siewerth discloses that longitudinal sections (5) are electrically coupled to each other (at 7, Page 7) through metal fusion (Page 6). With respect to claim 53, Siewerth discloses a method wherein the conduit (1) is placed underground (Fig 5), wherein the cover (at 4) is leaned over the base (at 2) to close the conduit (1). With respect to claim 54, Siewerth discloses that the cover portion (at 4) and the base portion (at 7) each have longitudinal sections (5) which are longitudinally shifted from each other (Fig 1). With respect to claim 53, Siewerth discloses a method wherein the conduit (1) is placed underground (Fig 5), wherein the cover (at 4) is leaned over the base (at 2) to close the conduit (1).

However Siewerth doesn't specifically disclose the superimposed portion having a width that is at least five times greater than the thickness of the air gap (claim 31), nor the air gap being 3% of the perimeter (claim 32), nor the contact elements having a reciprocal longitudinal distance of at most 50 cm (claim 34), nor the longitudinal section being superimposed at a length of at least 25% (claim 38), nor the electrical connection having a conductance of 150S/m (claim 46), nor the electrical connection having a

conductance of 500S/m (claim 47), nor the electrical connection having a conductance of 1500S/m (claim 48).

With respect to claims 31-32, 34, 38, 38, and 46-47, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the protective device of Siewerth to comprise the superimposed portion having a width that is at least five times greater than the thickness of the air gap, the air gap being 3% of the perimeter, the contact elements having a reciprocal longitudinal distance of at most 50 cm, the longitudinal section being superimposed at a length of at least 25%, and the electrical connection having a conductance of at least 150S/m, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller, 105 USPQ 233.*

8. Claims 30 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siewerth (DE Pat Num 27 10620) in view of Fasterding et al (DE Pat Num 3447836A1, herein referred to as Fasterding). Siewerth discloses an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3) as disclosed above with respect to claims 28 & 46.

However, Siewerth doesn't specifically disclose the contact elements being metallic clips made of ferromagnetic material (claims 30 & 52).

Fasterding discloses a protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather

influences (abstract). Specifically, with respect to claims 30 & 52, Fasterding discloses a protective system (Fig 2) comprising at least one electrical conductor (13) being inserted in a conduit (1) comprising a base element (at 1) and a cover (5), wherein the base (1) and cover (5) are joined by contact elements (6) made of ferromagnetic material (i.e. steel, abstract).

With respect to claims 30 & 52, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the protective conduit of Siewerth to comprise the contact elements configuration as taught by Fasterding because Fasterding teaches that such a configuration provides a protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather influences (abstract).

Response to Arguments

9. Applicant's arguments filed September 6, 2006 have been fully considered but they are not persuasive. Specifically, the applicant argues the following:

A) Siewerth cannot anticipate the claimed invention because Siewerth doesn't specifically teach the individual bars of the base being in electrical contact with the bars of the top, but rather teaches away because Siewerth states that the conduit doesn't need to be in close contact with the top on Page 7.

B) Siewerth discloses that the individual bars of the top and bottom parts are insulated with a protective coating and therefore cannot in electrical contact with each other.

C) Siewerth doesn't disclose that the individual bars are either metal fusion joints or resilient members suitable to penetrate ferromagnetic material and therefore cannot anticipate the claimed invention.

D) A proper prima facie case of obviousness has not been established because there is no suggestion to combine the teachings of Siewerth and Fasterding.

With respect to arguments A-C, the examiner respectfully traverses. Firstly, it should be stated that Figure 1 clearly illustrates the top and bottom covers being in contact with each other. It is not wrong for the examiner to rely on the drawings for what it illustrates. Specifically, the MPEP states the following:

2125 Drawings as Prior Art

DRAWINGS CAN BE USED AS PRIOR ART

Drawings and pictures can anticipate claims if they clearly show the structure which is claimed. In re Mraz, 455 F.2d 1069, 173 USPQ 25 (CCPA 1972). However, the picture must show all the claimed structural features and how they are put together. Jockmus v. Leviton, 28 F.2d 812 (2d Cir. 1928). The origin of the drawing is immaterial. For instance, drawings in a design patent can anticipate or make obvious the claimed invention as can drawings in utility patents. When the reference is a utility patent, it does not matter that the feature shown is unintended or unexplained in the specification. The drawings must be evaluated for what they reasonably disclose and suggest to one of

ordinary skill in the art. In re Aslanian, 590 F.2d 911, 200 USPQ 500 (CCPA 1979). See MPEP § 2121.04 for more information on prior art drawings as "enabled disclosures."

Secondly, while Siewerth does state that the cover and top do not need to be in contact with each other, clearly Siewerth also states that the "The top covers need only be placed on the top of the cage" on Page 7, third paragraph. Thirdly, the examiner also agrees that Siewerth teaches that the netting of both the cover and the bottom portion may be completely covered with anticorrosion materials, Siewerth also teaches that the netting of both the cover and the bottom portion may be partially insulated or conductive (Pages 6-7, last two lines and first two lines, respectfully). Given the above comments, with respect to Figure 1, and complete pages 6-7, one of ordinary skill in the art knows that if the netting of the top and bottom portions are partially insulated, when that are attached as illustrated in Figure 1, clearly the top lid will be in electrical contact with the bottom portion at the locations were the partially insulated netting contains no insulation. Lastly, hypothetically speaking, even if Siewerth didn't teach the netting being partially insulated or electrically conductive, Siewerth clearly teaches that the netting can be completely covered with the anticorrison material, lead (see Page 7), which is conductive. While lead is a poor conductor, it is a conductor, capable of providing electrical contact between the lid and bottom portion as illustrated in Figure 1. Therefore, clearly Siewerth teaches the lid and the bottom portion being in electrical contact with each other. In light of the above comments, the examiner respectfully states that the 35 USC 102(b) rejection is proper and just.

With respect to argument D, the examiner respectfully traverses. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Siewerth discloses all of the claim limitations, as recited above, but doesn't specifically disclose the contact elements being metallic clips made of ferromagnetic material. Fasterding discloses a protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather influences (abstract) wherein at least one electrical conductor (13) is inserted in a conduit (1) comprising a base element (at 1) and a cover (5), wherein the base (1) and cover (5) are joined by contact elements (6) made of ferromagnetic material (i.e. steel, abstract). Based on the teaching of Fasterding, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the protective conduit of Siewerth to comprise the contact elements configuration as taught by Fasterding because Fasterding teaches that such a configuration provides a protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather influences (abstract). The MPEP instructs the examiner to met three criteria, to establish a proper prima facie case of obviousness. Specifically, the MPEP states

ESTABLISHING A PRIMA FACIE CASE OF OBVIOUSNESS

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

Clearly, as disclosed above, there exist a motivation to modify the conduit of Siewerth with the contact elements of Fasterding. Clearly, there exist a reasonable expectation of success, because both conduits are in the same field of endeavour and have the same problem solving areas and clearly the contact elements of Fasterding would not effect the propose or utility of the conduit of Siewerth. Thirdly, all of the claimed subject matter is disclosed in the combination of both references. Therefore, there does exist a proper prima facie case of obviousness. In light of the above comments, the examiner respectfully submits that the 35 USC 103(a) rejection are proper and just.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
October 30, 2006